Dolichopodidae (Diptera) new to the Swedish fauna

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Grichanov, I. & Danielsson, R.: Dolichopodidae (Diptera) new to the Swedish fauna [Nya styltflugor (Diptera: Dolichopodidae) för Sverige.] – Entomologisk Tidskrift 122 (3): 131-134. Lund, Sweden 2001. ISSN 0013-886x.

Examination by the first author of unsorted material of Dolichopodidae deposited in Lund Zoological Museum and collected mainly during the last 40 years by R. Danielsson and H. Andersson has resulted in many new province records and an additional 12 species new to Sweden. The species reported new to Sweden are: *Chrysotus blepharosceles, C. palustris, C. suavis, Cryptophleps kerteszi, Dolichopus subpennatus, Hercostomus argentifrons, H. blankaartensis, Medetera senicula, Rhaphium gravipes, Syntormon monilis, Thrypticus intercedens* and *T. tarsalis.*

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A check list compiled by Grichanov (in press) has included about 320 species of long-legged flies (Dolichopodidae) known in the Swedish fauna. Some species have been recorded for Sweden for the first time. This paper gives detailed distribution data for those species. They have been identified by the first author as a result of the treating of about seven thousand unsorted dolichopodid specimens collected mainly during the last 40 years by R. Danielsson and H. Andersson in various provinces of the country. Those species are Chrysotus blepharosceles, C. palustris, C. suavis, Cryptophleps kerteszi, Dolichopus subpennatus, Hercostomus argentifrons, H. blankaartensis, Medetera senicula, Rhaphium gravipes, Syntormon monilis, Thrypticus intercedens and T. tarsalis. The material is deposited in Lund Zoological Museum (MZLU). In Sweden adults and larvae of almost all species of long-legged flies are predators inhabiting moist substrata. Small-sized species may be saprophages in the larval stage. Species of only one genus (Thrypticus) are known to be phytophages living inside stems of cereal grasses. Most of the numerous species of the cosmopolitan genus *Medetera* are associated with tree trunks, especially in boreal forests, where their larvae are predacious mainly on bark-beetles (Coleoptera). *Dolichopus* and *Hercostomus* species are common on grass at small puddles and along rivulets in deciduous forests and meadows.

Genus Chrysotus Meigen, 1824

Chrysotus blepharosceles Kowarz, 1874

Material examined. 2♂♂, [Skåne]: **Sk**, Lund, 13.6.1959, 1428, H. Andersson / Chrysotus ♂ blepharosceles Kw., det. Hedström, 1965 [H. Andersson's collection]; 3♂♂, 1♀, [Skåne]: **Sk**, Kullaberg, 14.VII.1967 & 2.VIII.1969, H. Andersson [MZLU].

Remarks. The species is close to *C. gramineus* (Fallén, 1823) and *C. obscuripes* Zetterstedt, 1838, differing in front tibia being rusty yellow, ciliated above and below, with some cilia below being distinctly longer than diameter of tibia; mid tibia is brownish black (d'Assis Fonseca, 1978).

Distribution. The species is widely distributed in Europe, being known from Great Britain, the Netherlands, France, Belgium, Germany, Poland, Italy and Denmark.

Chrysotus palustris Verrall, 1876

Material examined. $2 \circlearrowleft \circlearrowleft, 2 \circlearrowleft \circlearrowleft, [Gotland]$: **Go**, Visby, 1.VII.1920, leg. O. Ringdahl; $2 \circlearrowleft \circlearrowleft, [V\"{a}sterg\"{o}tland]$: **Vg**, Kinneved, 22.VII.1942, leg. O. Ringdahl; $1 \circlearrowleft, [Sk\"{a}ne]$: **Sk**, $\.{a}hus$, 29.VI.1915, leg. E. Wahlgren.

Remarks. C. palustris is closely related to *C. albibarbus* Loew, 1857, differing in white pollinose frons, and face being narrower, at most as wide as front ocellus. *C. albibarbus* has metallic frons, whereas face is nearly as wide as ocellar tubercle (Parent, 1938).

Distribution. So far the species was known from Great Britain and Germany only. Lund Museum has also 2 specimens of the species collected by Ringdahl in Norway (Vågåmo, 13.VII.1953).

Chrysotus suavis Loew, 1857

Material examined. 2♂♂, [Skåne]: **Sk**, N of Krankesjön, 1 & 5,VII.1970, leg. H. Andersson; 2♂♂, [Norrbotten]: **Nb**, Piteå, 4.VII.1947, leg. O. Ringdahl.

Remarks. C. suavis together with C. palustris belongs to a group of species having pale pilosity on front coxae. C. suavis with the eyes being contiguous in lower part of face is closely related to C. romanicus Pârvu, 1995 described from Romania and C. dorli Negrobov, 1980 from Tajikistan, differing in having surstyli widened at base (Pârvu, 1995; Negrobov, 2000).

Distribution. A transpalearctic species spread from Canary and British Islands across Finland and the Caucasus to Mongolia.

Genus Cryptophleps Lichtwardt, 1898

Cryptophleps kerteszi Lichtwardt, 1898

Material examined. 1♂, 1♀, [Skåne]: **Sk**, Klostersågen, 8.VII.1981, leg. H. Andersson.

Remarks. The genus is recorded from North Europe for the first time. Only one European species is known (Negrobov, 1991).

Distribution. This is a rare species found in

Serbia, Romania, Saratov Region in central Russia and China.

Genus Dolichopus Latreille, 1796

Dolichopus subpennatus d'Assis Fonseca, 1976

Material examined. $42 \bigcirc \bigcirc \bigcirc$, [Skåne]: Dalby, 11.VI.1988, R. Danielsson; Dalby, O. Mölla, 11.VI.1988, 7.VI.1989, 13.VI.1992, R. Danielsson; Ålabodarna, 17.VI.1988, R. Danielsson; Lillöviken, på Eupatorium, 3.VII.1954; Haväng, Verkeån, dystrand, 5.VII.1954; Haväng, Verkeån, på Phalaris, 5.VII.1954, Richard Dahl; Haväng, 17.VI.1965, Bäck, H. Andersson; Sjöbo, 15.VII.1969, H. Andersson; Färlöv, 6.VII.1923, I. Amitzböll; Ystad, 21.VII.1915, I. Amitzböll; Ystad, VII.1953, Richard Dahl; Vitemölla, 28.VI.1953, dynhed, Ardö; Arlöv, 9. VII. 1950, S. Berdén; Linnebjer, 27. VI. 1950, Sven Berdén; [Gotland]: Gtl, Tingstäde, 2.VII.1920, O. Ringdahl; Visby, 1.VII.1920, leg. O. Ringdahl; [Småland]: Sm, Traryd, Axhult, juli 1952, G. Olsson; [Öland]: Öl, Löt, 26.VI.1932, Kemner; [Dalarna]: Dr, Ål, Insjön, Bo Tjeder.

Remarks. This is a sister species to *D. pennatus* Meigen, 1824, differing in central area of swelling on male hind tibia being narrow rather than rounded and occupied by tiny black setulae rather than pale yellow pile; it bears also a sparse fringe of about 10 pale hairs on lower margin of hind face of scutellum, whereas in *D. pennatus* there is a multiple fringe of numerous pale hairs not confined to lower margin (d'Assis Fonseca, 1978). *D. subpennatus* described originally from England and mentioned for "Russia", an obviously overlooked species, appears to be widely distributed in Europe and Sweden in particular.

Distribution. Great Britain, Ireland, the Netherlands, Denmark, Germany, Czech Republic, Slovakia, "Russia".

Genus Hercostomus Loew, 1857

Hercostomus argentifrons Oldenberg, 1916 Material examined. 1♂, [Öland]: Öl, Halltorps Hage RN-1547/6297, 3-6.VIII.1976, leg. Andersson-Danielsson; 10, [Södermanland]: Sö, Sparreholm, 6.VII.1989, leg. H. Andersson.

Diagnosis. According to Parent (1938) H. argentifrons belongs to the group V of species having black femora and black postocular setae. It has frons and face silvery white; antennal stylus middorsal; palpi and proboscis small; legs almost entirely black; trochanters and knees yellow-red; fore tibia without long apicoventral cilia; mid tibia with 1 anteroventral bristle; halters yellow; epandrium trapezoidal; epandrial lobes moderately developed; cercus black, subtriangular, higher than long.

Distribution. It is very surprising to see this species in Sweden, since it is known previously-from the Italian Alps only.

Hercostomus blankaartensis Pollet, 1991

Material examined. 10♂♀, [Skåne]: **Sk**, Ilstorp, 3-12.VII [late 19th century], leg. C.D.E. Roth; **Sk**, Ystad, 4.VI.1913, leg. I. Ammitzböll.

Remarks. H. blankaartensis is close to H. assimilis (Staeger, 1842), differing in cercus ochreous yellow, quadrate; fore coxa mostly yellow, especially on lateral side; femora and tibiae entirely yellow; tarsi only feebly infuscated. Females differ in having hind tibia and basitarsus entirely yellow; fore and mid tarsi only feebly infuscated; fore coxa largely yellow, in particular on lateral side (Pollet, 1991).

Distribution. Belgium, Great Britain, the Netherlands, France, Hungary, the Crimea.

Genus Medetera Fischer von Waldheim, 1819

Medetera senicula Kowarz, 1877

Material examined. 1♂, [Skåne]: **Sk**, Stenshuvud, 14.VIII.1977, leg. H. Andersson; 4♂, **Sk**, Vombsjön, SW hörnet, 18.VI.1975, leg. H. Andersson; 7♂♂, 4♀♀, [Norrbotten]: **Nb**, Råneå, Högsön, 1.VII.1972 & 9-11.VII.1975, leg. H. Andersson; 1♂, 2♀♀, **Nb**, W Luleå, 4.VII.1972, leg. H. Andersson.

Remarks. M. senicula belongs to a group of species having lateral scutellar setae reduced or totally lost; it has entirely dusted, monochrome face and close to M. plumbella Meigen, 1824, differing in mostly black legs, and male cercus

having a strong spiniform apical seta (Negrobov & Stackelberg, 1972).

Distribution. This is a Boreal European species found in Finland, Denmark, Great Britain, Poland, Estonia and north-western Russia.

Genus Rhaphium Meigen, 1803

Rhaphium gravipes Haliday, 1851

Material examined. 17, [Jämtland]: **Jä**, Undersåker, 22.VI.1932, leg. O. Ringdahl.

Remarks. The species is close to R. consobrinum Zetterstedt, 1843, R. penicillatum Loew, 1850 and R. riparium (Meigen, 1824), differing in long and unforked cercus and somewhat swollen at apex ventrally front basitarsus (d'Assis Fonseca, 1978).

Distribution. The rare species was known from central Europe (including Germany and Great Britain) and Leningrad Region of Russia. Lund Museum has also 11 specimens of the species collected by Ringdahl in Norway.

Genus Syntormon Loew, 1857

Syntormon monilis (Haliday, 1851)

Material examined. 1♂, [Östergötland]: Ög, Omberg, Sjövägen/Bamsevägen, 4.VII.1989 (2721), leg. H. Andersson.

Remarks. The species is related to *S. tarsatus* (Fallén, 1823), differing in ornamentation of mid and hind tarsi and other characters. 4th and 5th segments of mid tarsus are slightly widened, hind tibia is yellow and simple, hind basitarsus has spiniform basoventral process (Negrobov, 1975).

Distribution. This is a widely distributed West Palearctic species inhabiting area from North Africa and the North Caucasus to Denmark and Leningrad Region of Russia.

Genus Thrypticus Gerstaecker, 1864

Thrypticus intercedens Negrobov, 1967

Material examined. 1♂, [Skåne]: Sk, Mölle, 24.6.1973, leg. H. Andersson; 2♂♂, [Småland]: Sm, Bolmen, 16.VII. 1945, leg. O. Ringdahl; 2♂♂, 1♀, Sm, Söderåkra, Fulvik, 25.VI.1989, R. Danielsson; 1♂ [Öland]: Öl,

Halltorps Hage, 19-23.VII.1976, leg. Andersson & Danielsson; 1♂, [Bohuslän]: **Bo**, Grinneröd, Grinneredsjön, 4.VII.1945, leg. B. Tjeder.

Remarks. Thrypticus intercedens is very close to *T. pollinosus* Verrall, 1912 (Negrobov & Stackelberg, 1971), differing in distal thin part of hypandrium being as long as or longer (rather than 1/3 shorter in *T. pollinosus*) than proximal broad part; the character usually clearly visible in dry specimens.

Distribution. The species was most probably confused earlier with more common *T. pollinosus*. To date the known localities include Germany, Norway, Yaroslavl Region of Russia, Iran and southern Siberia (Sayan Mountains).

Thrypticus tarsalis Parent, 1932

Material examined. 1♂, [Skåne]: Sk, Kullaberg, 10.VI.1949, O. Ringdahl; 4♂♂, Sk, Vomb, 26.V.1982, H. Andersson; 1♂, Sk, Dalby, Skrylle, 23.V.1989, R. Danielsson; 1♂, 1♀, Sk, Dalby, Torna Hällestad, 9.VI.1988, R. Danielsson; 1♂, 1♀, Sk, Dalby, Ö. Mölla, 28.V.1989, R. Danielsson.

Remarks. The species is close to *T. bellus* Loew, 1869 and *T. pruinosus* Parent, 1932, differing in narrower surstyli, nearly three times as long as wide (ventral view) and other characters. Palpi are usually shorter, hardly longer than postpedicel; stylus is very slender and tapering to a fine tip; mid tibia entirely brownish (Negrobov & Stackelberg, 1971; d'Assis Fonseca, 1978).

Distribution. The species was known from Great Britain, Norway and north-western Russia.

Acknowledgements

The work was financially supported by the Swedish Institute (2001).

References

D'Assis Fonseca, E.C.M. 1978. Diptera Orthorrhapha Brachycera. V. Dolichopodidae. - Handbooks for the identification of British insects. IX. part 5. P. 1-90. Grichanov, I. (in press) A check-list of Swedish Dolichopodidae (Diptera). Ent. Tidskr.

Meuffels, H. & Grootaert, P. 1990. The identity of Sciapus contristans (Wiedemann, 1817) Diptera Dolichopodidae and a revision of the species group of its relatives. – Bull. Inst. Roy. Sci. Nat. Belg., Ent. 60: 161-178.

Negrobov, O.P. & Stackelberg, A.A. 1971-1977. Dolichopodidae, Unterfamilie Medeterinae. - In E. Lindner (ed.). Die Fliegen der Palaearktischen Region. Stuttgart, IV, 29, 284 (1971), 289 (1972), 302, 303 (1974), 316 (1977): 238-354.

Negrobov, O.P. Review of the genus *Syntormon* Meig. (Dolichopodidae, Diptera) of the Palearctic fauna - Entomol. obozrenie. - 1975. 54(3): 652-664.

Negrobov, O.P. 1991. Dolichopodidae. - In: Soos A., Papp L. & Oosterbroeck P. (Eds.): Catalogue of Palaearctic Diptera 7: Dolichopodidae-Platypezidae, Akademiai Kiado: 1-291, Budapest:.

Parent, O. 1938. P. Diptères Dolichopodidae - Faune de France. Vol. 35. Paris. P. 1-720.

Pârvu, C., 1995. Some Dolichopodidae (Diptera) from Romania (X) of the genus *Chrysotus* Meig., with the description of *C. romanicus* n. sp., Trav. Mus. Hist. nat. "Grigore Antipa", 35: 407-418.

Pollet, M., 1991 [1990]. Phenetic and ecological relationships between species of the subgenus *Hercostomus* (*Gymnopternus*) in Western Europe with the description of two new species (Diptera: Dolichopodidae), Syst. Entomol., 1990, vol. 15, no. 3, pp. 359-381.

Sammanfattning

Igor Grichanov under ett längre besök vid Zoologiska museet i Lund undersökt museets osorterade material av styltflugor (Dolichopodidae) omfattande ca 7000 individer.

I materialet, som framför allt insamlats under de senaste 40 åren, har upptäckts 12 för Sverige nya arter och ett stort antal nya landskapsfynd. Fynddata för de nya arterna ges i artikeln. En art, Hercostomus argentifrons Oldenberg 1916, funnen på Öland och i Södermanland är tidigare bara känd från de italienska Alperna. Totalt är nu ca 320 arter styltflugor kända från Sverige. I ett kommande nummer av Entomologisk Tidskrift presenteras en fullständig förrteckning över alla svenska arter.